

Pre-Algebra/ Foundations Curriculum

Chapter 1

Logic Problems

Problem Solving

Numbers and Expressions

Variables and Expressions

Properties (Associative/Commutative) Simplifying Algebraic

Variables and Equations

Chapter 2

Integers and absolute value

Adding Integers

Subtracting Integers

Multiplying Integers

Dividing Integers

Chapter 3

Distributive Property

Simplifying Algebraic Expressions

Solving Equations: Adding, Subtract.

Multiplying & Dividing

Solving 2 step equations

Using formulas and equations

Chapter 4

Factors and Monomials

Powers and Exponents

Prime Factorization

Greatest Common Factor

Simplifying Algebraic

Fractions

Multiplying/Dividing Monomials

Negative Exponents

Scientific Notation

Chapter 5

Writing fractions as Decimal

Rational Numbers

Multiplying Rational Numbers

Dividing Rational Numbers

Adding/Subtracting Like Frac.

Least Common Multiple

Adding/Subtracting Unlike

Fractions

Equations and rational numb.

Statistics

Mean, Median, Mode
Line, Bar graphs
Histograms
Box & Whiskers
Stem & leaf

Probability

Experimental Probability
Theoretical Probability
Counting Outcomes (optional)
Permutations & Combinations (optional)
Odds (optional)

Chapter 6

Ratio and Rate
Proportions
Scale Drawings and Models
Fractions, decimals, percents
Percent Proportions
Percent Equations
Percent of Change

Chapter 7

Solving Equations with variables
on each side
Solving Equations with grouping
symbols
Inequalities
Solving Inequalities by Adding/Subt.
Solving Inequalities by Multiplying/Dividing
Solving Multi-Step Inequalities

Chapter 8

Functions
Linear Equations
Graphing Equations
Slope
Rate of Change
Slope/Intercept Form
Writing Linear Equations
Solving Systems of Equat.
Best-Fit Lines
Graphing Inequalities

Chapter 9

Squares and Sq. Roots
The Real Number Syst.
Angles, Triangles
The Pythagorean Theorem
Similar Triangles

Chapter 10

Line and Angle Relation.
Congruent Triangles
Quadrilaterals
Polygons
Area

Chapter 13 (optional)

Polynomials
Adding/Subtracting poly.
Multiplying/Dividing

